

IN THE CLAIMS:

Claims 1 through 83 and 86 were previously cancelled. Claims 84, 85 and 87 through 117 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1.-83. (Cancelled)

84. (Currently amended) A solid-~~gas-generating~~ gas-generating composition formulated for generating gas suitable for use in deploying an air bag or balloon from a supplemental restraint system, the solid-~~gas-generating~~ gas-generating composition consisting essentially of:

at least one complex of a metal cation and at least one neutral ligand which comprises ammonia, wherein the metal cation is a transition metal cation or an alkaline earth metal cation, and sufficient anion to balance ~~the~~ a charge of the metal cation;

and calcium stearate; and

optionally co-oxidizer in an amount less than 50% by weight of the solid-~~gas-generating~~ gas-generating composition.

85. (Currently amended) A solid-~~gas-generating~~ gas-generating composition formulated for generating gas suitable for use in deploying an air bag or balloon from a supplemental restraint system, the solid-~~gas-generating~~ gas-generating composition consisting essentially of:

a complex of a metal cation and a neutral ligand containing hydrogen and nitrogen and sufficient oxidizing anion to balance ~~the~~ a charge of the metal cation, wherein the complex is selected from the group consisting of metal nitrite ammines, metal nitrate ammines, metal perchlorate ammines, and mixtures thereof; and

a release agent.

86. (Cancelled)

87. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the metal cation is a transition metal, alkaline earth metal, metalloid, or lanthanide metal cation.

88. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 87, wherein the transition metal cation is a cobalt cation.

89. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 87, wherein the metal cation is a cation of a metal selected from the group consisting of cobalt, magnesium, manganese, nickel, titanium, copper, chromium, zinc, tin, rhodium, iridium, ruthenium, palladium and platinum.

90. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the oxidizing anion is selected from the group consisting of nitrate, nitrite, chlorate, perchlorate, peroxide, and superoxide.

91. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the oxidizing anion is free of carbon.

92. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, further comprising a binder.

93. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 92, wherein the binder is water soluble.

94. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 93, wherein the binder is selected from naturally occurring gums, polyacrylic acids, and polyacrylamides.

95. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 92, wherein the binder is not water soluble.

96. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 92, wherein the binder is selected from nitrocellulose, VAAR (vinyl acetate vinyl alcohol resin), and nylon.

97. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the complex is hexamminecobalt (III) nitrate ($[(\text{NH}_3)_6\text{Co}](\text{NO}_3)_3$) and the composition further includes copper (II) trihydroxy nitrate ($\text{Cu}_2(\text{OH})_3\text{NO}_3$).

98. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the complex includes at least one common ligand, in addition to the ammonia ligand.

99. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 98, wherein the common ligand is selected from the group consisting of aquo (H_2O), hydroxo (OH), perhydroxo (O_2H), peroxy (O_2), carbonato (CO_3), carbonyl (CO), oxalato (C_2O_4), nitrosyl (NO), cyano (CN), isocyanato (NC), isothiocyanato (NCS), thiocyanato (SCN), amido (NH_2), imido (NH), sulfato (SO_4), chloro (Cl), fluoro (F), phosphato (PO_4), and ethylenediaminetetraacetic acid (EDTA) ligands.

100. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the complex includes a common counter ion in addition to the oxidizing anion.

101. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 100, wherein the common counter ion is selected from the group consisting of hydroxide (OH^-), chloride (Cl^-), fluoride (F^-), cyanide (CN^-), thiocyanate (SCN^-), carbonate (CO_3^{2-}), sulfate (SO_4^{2-}), phosphate (PO_4^{3-}), oxalate ($\text{C}_2\text{O}_4^{2-}$), borate (BO_4^{5-}), and ammonium (NH_4^+) counter ions.

102. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, wherein the composition is formulated from ingredients comprising:
 at least one complex of
 a metal cation
 at least one ammonia ligand, and
 sufficient oxidizing anion to balance ~~the~~ a charge of the ~~metal~~ complex wherein the composition contains about 50% to about 80% by weight of the complex; and
~~the releasing~~ release agent.

103. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, further comprising a co-oxidizer.

104. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is selected from the group consisting of alkali, alkaline earth, lanthanide or ammonium perchlorates, chlorates, peroxides, nitrites, and nitrates.

105. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is selected from the group consisting of metal oxides, metal hydroxides, metal peroxides, metal oxide hydrates, metal oxide hydroxides, metal hydrous oxides, basic metal carbonates, basic metal nitrates, and mixtures thereof.

106. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is selected from the group consisting of oxides of copper, cobalt, manganese, tungsten bismuth, molybdenum, and iron.

107. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a metal oxide selected from the group consisting of CuO, Co₂O₃, Co₃O₄, CoFe₂O₄, Fe₂O₃, MoO₃, Bi₂MoO₆, and Bi₂O₃.

108. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a metal hydroxide selected from the group consisting of Fe(OH)₃, Co(OH)₃, Co(OH)₂, Ni(OH)₂, Cu(OH)₂, and Zn(OH)₂.

109. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a metal oxide hydrate or metal hydrous oxide selected from the group consisting of ~~Fe₂O₃ · xH₂O, SnO₂ · xH₂O,~~ Fe₂O₃ · xH₂O, SnO₂ · xH₂O, and MoO₃H₂O.

110. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a metal oxide hydroxide selected from the group consisting of $\text{CoO}(\text{OH})_2$, $\text{FeO}(\text{OH})_2$, $\text{FeO}(\text{OH})_2$, $\text{MnO}(\text{OH})_2$, and $\text{MnO}(\text{OH})_3$.

111. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a basic metal carbonate selected from the group consisting of CuCO_3 , $\text{Cu}(\text{OH})_2$ (malachite), $2\text{Co}(\text{CO}_3) \cdot 3\text{Co}(\text{OH})_2 \cdot \text{H}_2\text{O}$, $\text{Co}_{0.69}\text{Fe}_{0.34}(\text{CO}_3)_{0.2}(\text{OH})_2$, $\text{Na}_3[\text{Co}(\text{CO}_3)_3]3\text{H}_2\text{O}$, $\text{Zn}_2(\text{CO}_3)(\text{OH})_2$, $\text{Bi}_2\text{Mg}(\text{CO}_3)_2(\text{OH})_4$, $\text{Fe}(\text{CO}_3)_{0.12}(\text{OH})_{2.76}$, ~~$\text{Cu}_{1.54}\text{Zn}_{0.46}(\text{CO}_3)(\text{OH})_2$~~ , $\text{Cu}_{1.54}\text{Zn}_{0.46}(\text{CO}_3)(\text{OH})_2$, $\text{CO}_{0.49}\text{Cu}_{0.51}(\text{CO}_3)_{0.43}(\text{OH})_{1.1}$, $\text{Ti}_3\text{Bi}_4(\text{CO}_3)_2(\text{OH})_2\text{O}_9(\text{H}_2\text{O})_2$, and $(\text{BiO})_2\text{CO}_3$.

112. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 103, wherein the co-oxidizer is a basic metal nitrate selected from the group consisting of $\text{Cu}_2(\text{OH})_3\text{NO}_3$, $\text{Co}_2(\text{OH})_3\text{NO}_3$, $\text{CuCo}(\text{OH})_3\text{NO}_3$, $\text{Zn}_2(\text{OH})_3\text{NO}_3$, $\text{Mn}(\text{OH})_2\text{NO}_3$, $\text{Fe}_4(\text{OH})_{11}\text{NO}_3 \cdot 2\text{H}_2\text{O}$, $\text{Mo}(\text{NO}_3)_2\text{O}_2$, $\text{BiONO}_3 \cdot \text{H}_2\text{O}$, and $\text{Ce}(\text{OH})(\text{NO}_3)_3 \cdot 3\text{H}_2\text{O}$.

113. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 85, further comprising a carbon powder present from 0.1% to 6% by weight of the ~~gas-generating~~ solid gas-generating composition.

114. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 86, wherein the complex is selected from the group consisting of metal nitrate ammines.

115. (Currently amended) ~~A gas-generating~~ The solid gas-generating composition as defined in claim 114, wherein the release agent comprises graphite, molybdenum sulfide, calcium stearate or boron nitride.

116. (Currently amended) A solid-~~gas-generating~~ gas-generating composition formulated for generating gas suitable for use in deploying an air bag or balloon from a supplemental restraint system, the solid-~~gas-generating~~ gas-generating composition consisting essentially of:

a complex of a metal cation and a neutral ligand containing hydrogen and nitrogen and sufficient oxidizing anion to balance the charge of the metal cation, wherein the complex is selected from the group consisting of metal nitrite ammines, metal nitrate ammines, metal perchlorate ammines, and mixtures thereof;

wherein the composition contains from 48.5% to less than 100% of the complex, and the composition contains a release agent.

117. (Currently amended) ~~A~~ The solid-~~gas-generating~~ gas-generating composition according to claim 85, wherein when the composition combusts, the combustion takes place at a rate and a temperature sufficient to qualify the composition for use as a ~~gas-generating~~ gas-generating composition to generate gas suitable for use in deploying the air bag or the balloon.